

AMENDMENTS TO THE CLAIMS

Please amend the claims below by deleting items with a strikeout (i.e. ~~patent~~) or brackets / double brackets(i.e., [patent] or [[patent]]) and adding items with an underline (i.e. patent).

1. (Original) A joint for flat rigid parts, comprising projections, which are embodied on the mating sides of the parts in the form of bulbous breadths at the edge thereof and necks at the basis thereof, and complementary joggles, which are embodied in the form of bulbous slots corresponding to the bulbous breadths of the projections and gradually changing into grooves corresponding to the projections necks, characterized in that the surfaces of the projections edges and the surfaces of the slots bottoms mating therewith are embodied in the form of cones, wherein the peaks of the conical surfaces of the projections edges and of the slots bottoms are arranged on the opposite sides with respect to the connecting parts.

2. (Original) A joint as claimed in claim 1, characterized in that the radius of curvature of the guiding lines of the conical surfaces of the projections edges and of the slots bottoms are embodied in such a way that they tend to infinity.

3. (Original) A joint as claimed in claim 1, characterized in that at least one connecting part is embodied in the form of a through-thickness composite part.

4. (New) A joint for flat parts having a first mating side and a second mating said,

said joint comprising:

a first series of projections formed on said first mating sides and having a bulbous breadth at the edge thereof and a neck at a basis thereof;

a second series of projections formed on said second mating side and having a bulbous breadth at the edge thereof and a neck at a basis thereof;

complementary joggles corresponding to said first bulbous breadths and said second bulbous breadths respective, such that said joggles gradually changing into grooves corresponding to the projections necks.

5. (New) The joint for flat parts of Claim 4, wherein said joggles are embodied in the form of bulbous slots.

6. (New) The joint for flat parts of Claim 5, wherein the surfaces of the projections edges and the surfaces of the slots bottoms mating therewith comprise cones having a guiding line on a conical surface that passes through a peak, and wherein said guiding lines and said peaks are arranged on the opposite sides with respect to the connecting parts.

7. (New) The joint for flat parts of Claim 6, wherein a radius of curvature R of the guiding lines of the conical surfaces is equal to the radius of curvature of the slot within the accuracy of the value of the gap between the connecting parts .

8. (New) A method of assembling the joint for flat parts of Claim 7, said method for connecting an upper piece to a lower piece and comprising:
- a. Overlapping said upper piece and said lower piece in such a way that their surfaces are positioned at an angle that is close to a right angle;
 - b. Entering bulbous breadths of the lower piece into enter the bulbous slots of the upper piece
 - c. Placing the projections of each upper piece laced into the grooves each mating lower piece, respectively;
 - d. Rotating said upper piece relative to said lower pieces until conical surfaces of the breadths meet the conical surfaces of the slots, wherein both parts will be located in the same plane.
9. (New) The joint for flat parts of Claims 1 or 7, wherein a uniform rigid plate is formed capable of working in tension-compression and in shear, virtually in the same way as a whole plate.
10. (New) The joint for flat parts of Claim 9, wherein an assembled construction works in bending in only one direction, namely when the bending moment has the same direction as the rotation of the plates during the assembly process.
11. (New) The joint for flat parts of Claim 10, wherein disassembling of the construction is

performed in reverse order.